Wi-Fi MDO Demo

Managed Wi-Fi with Intelligent Traffic Steering:

- Mobile Data Offload
- Multi-Source Edge Analytics
- Wi-Fi Monetization

Together We Build, Test & Deploy
• MANAGED WI-FI
• INCREASE MDO
• EDGE ANALYTICS & INSIGHTS
• NEW REVENUE OPPORTUNITIES

INTELLIGENT EDGE CONNECTIVITY

SEAMLESS MOBILITY HOME, OFFICE & AROUND TOWN

A SUSTAINABLE MOBILE INTERNET FUTURE REQUIRES COMBINING LICENSED & UNLICENSED SPECTRUM

HETNET MOBILITY FOR RELIABLE, SAFE, AND COST-EFFICIENT CONNECTIVITY
# Key Features & Benefits

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E2E Carrier Wi-Fi/HetNet Mobility MDO Solution

- Smart Client Agent
  - SCA - AP Interface
  - SCA - Policy Server Interface
  - SCA - Gateway/Core Interface

Managed

Unmanaged

User Equipment

Value Added Services
- Location
- Analytics
High Level Architecture for Intelligent Wi-Fi Connectivity Management

- **Smart Client Agent (SCA)**: Connects to 4G/LTE for Client Device (UE)
- **Managed Wi-Fi AP(s)**: Communicates with Magma CWAG via GRE and Radius
- **Unmanaged Wi-Fi AP(s)**: Connects to Smart Client Agent (SCA)
- **Magma CWAG**: Functions as a central processor
- **AP Cloud Controllers**: Managed by Magma Orc8r
  - Magma Orc8r: Connects to Magma FGW via gRPC
  - Magma FGW: Provides Carrier Core (HSS/HLR, OCS, PCRF)

Connections:
- GRE
- Radius
- gRPC
- Web API
- Value Added Services (Location Analytics)
- SWx
- Data (Traffic) Path
Mobile - Day in the Life

Optimize
- Increase Mobile Data Offload
- Dead Spot/Congestion Avoidance
- Seamless HetNet
- Worry-Free Connectivity
Intelligent Traffic Steering on Managed & Unmanaged Wi-Fi

Cost Efficient Worry-Free Connectivity

1. **Unmanaged Wi-Fi**
   SCA avoids dead/weak spot and seamlessly steers traffic to LTE

2. **Managed Wi-Fi**
   MDO Orc8r informs SCA to connect to best managed Wi-Fi AP

3. **Unmanaged Wi-Fi**
   SCA continuously monitors Wi-Fi QoS parameters and aggregates with LTE if below policy thresholds.

Hybrid Mobility Enables Real-Time Network Decisions for Cost & User Experience Optimization.
(A) Intelligent Traffic Steering

Demos
2. Avoid Weak/Congested Wi-Fi
3. Fast Recovery from Zombie Wi-Fi (Backhaul Lost)
4. Intelligent Selection of Managed Wi-Fi APs

Benefits
- Leverage Licensed & Unlicensed Spectrum
- Reduce Network Costs with Increased MDO
- Increase Network Capacity & Coverage
- Improved QOE with Worry-Free Connectivity
- Deploy on Existing Devices without Modification

Optimized, Safe, & Cost-Efficient Mobility

Website Links:
- ARISTA
- facebook connectivity
- SHOELACE WIRELESS
Monetization and Personalization Services

Innovate
- Security/Privacy On-Demand
- Advanced Connection Modes
- Sponsored Boosting
- Traffic Flow Analytics

Upsell Subscribers with Advanced Premium Features for New Revenue Opportunities or Enhanced QoE.
Monetization/Differentiation Opportunities

Business Opportunities

1. Always Secure Connectivity
   Auto-Encrypt on Untrusted Wi-Fi or Encrypt On-Demand

2. Advanced Connection Modes
   Leverage All Spectrum for Super Charged Connectivity

3. Enhanced Connection Control and Privacy
   Smart Connection Routing
   Fine-Grain App Control

Upsell Subscribers with Advanced Premium Features for New Revenue Opportunities or Enhanced QoE.
(B) Monetization and Personalization Services

Demos
1. Auto Encryption on Untrusted Wi-Fi
2. Supercharge Connectivity
3. Smart Routing of Blocked Apps
4. Fine-Grain App Control
5. Multi-Source Edge Analytics for Real-time Footfall Traffic Flows

Benefits
✓ Leverage Licensed & Unlicensed Spectrum
✓ New Services Revenue / Market Differentiation
   ○ Trusted Security/Privacy Provided
   ○ Advanced Connection Modes
   ○ Sponsored App Boosting
✓ Deploy on Existing Devices without Modification
✓ Analytics with Actionable Insights

Optimized, Safe, & Cost-Efficient Mobility
Advance Edge Analytics that Drive Business Outcomes

Get actionable insights and drive business outcomes using edge analytics.

Benefits
✓ Real Time End Point Network Insights
✓ Set Wi-Fi offload success SLA and monitor
✓ Improve Network Coverage and Efficiency
✓ Improve Revenues Based on Footfall Heatmap Analysis